

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims:

1. (Currently amended) An air handling system for an indoor space comprising
a forced indoor air treatment component,
an input indoor air duct element and an output treated air duct element
respectively coupling said indoor air treatment component to said indoor
space,
a forced fresh air ventilator component for discharging stale air from the indoor space
to an outdoor environment and for replacing the discharged air with make-up air from
the outdoor environment, said fresh air ventilator component comprising stale air
input means coupled to a stale air output means and fresh make-up air input means
coupled to a fresh ~~return~~ air output means
a stale air duct element coupled to said stale air input means and to said input
indoor air duct element,
a primary fresh ~~return~~ air duct element coupling said fresh ~~return~~ air output means
to said output treated air duct element
characterized in that said system comprises
a further secondary fresh air path means ~~for~~ coupling said fresh ~~return~~ air output
means to said input indoor air duct element, and wherein said further secondary
fresh air path means comprises an air duct element having a first end coupled to said
fresh air output means and a second end coupled to said input indoor air duct
element.
2. (Currently amended) A system as defined in claim 1 comprising

a first air flow control means comprising a first damper element associated with said
~~return~~ primary fresh air duct element, said first damper element being independently
displaceable between a blocking configuration and a non-blocking configuration,

a second air flow control means comprising a second damper element associated with said further secondary fresh air path means, said second damper element being independently displaceable between a blocking configuration and a non-blocking configuration,

wherein in said respective blocking configuration, said first and second damper elements are respectively disposed to close off said ~~return~~ primary fresh air duct element and said further secondary fresh air path means to air flow, and in said respective non-blocking configuration, said first and second damper elements are respectively disposed such that air is able to circulate through said ~~return~~ primary fresh air duct element and said further secondary fresh air path means,

wherein said second air flow control means is configured such that, when an indoor air treatment component air blower means associated with said forced indoor air treatment component and a ventilation air blower means associated with said forced fresh air ventilator component are both activated, said second damper element is in said non-blocking configuration

and

wherein said first and said second air flow control means are each configured such that, when only the ventilation air blower means is activated, said first damper element is in said non-blocking configuration and said second damper element is in said blocking configuration.

3. (Original) A system as defined in claim 1 wherein said forced indoor air treatment component is a forced air furnace component and said output treated air duct element is an output heated air duct element.

4. (Currently amended – see original claim 3) A system as defined in claim 3 ~~wherein said secondary air path means comprises a reflux air duct element coupled to said return air duct element and to said input indoor air duct element.~~ 2 wherein said forced indoor air treatment component is a forced air furnace component and said output treated air duct element is an output heated air duct element.

5. (cancelled)

6. (Currently amended) A system as defined in claim 5 4 wherein said first and said second air flow control means are each configured such that, when a furnace air blower means associated with said forced air furnace component and a ventilation air blower means associated with said forced fresh air ventilator component are both activated, said first damper element and said second damper element are each in said non-blocking configuration.

7. (Currently amended) A system as defined in claim 5 4 wherein said first and said second air flow control means are each configured such that, when only ~~said a~~ furnace air blower means associated with said forced air furnace component is activated, said first damper element and said second damper element are each in said blocking configuration.

8. (cancelled)

9. (Currently amended) A system as defined in claim 5 4 wherein said first and said second air flow control means are each configured such that, when both ~~the a~~ furnace air blower means associated with said forced air furnace component and ~~the a~~ ventilation air blower means associated with said forced fresh air ventilator component are unactivated, said first damper element and said second damper element are each in said blocking configuration.

10. (Currently amended) A system as defined in claim 5 4 wherein said stale air duct element is coupled to said input indoor air duct element at a first position upstream of said forced air furnace component and said ~~reflux~~ air duct element of said further secondary fresh air path means is coupled to said input indoor air duct element at a second position downstream of said first position and upstream of said forced air furnace component.

11. (Currently amended) A system as defined in claim 5 4 wherein said first air flow control means comprises a first biasing element biasing said first damper element in said blocking configuration and wherein said second air flow control means comprises a second biasing element biasing said second damper element in said blocking configuration.

12. (Currently amended) A system as defined in claim 4 wherein said ~~return~~ primary fresh air duct element comprises a manifold ~~element~~ component, said

manifold ~~element~~ component comprising an air inlet, a first air outlet and a second air outlet, said air inlet being coupled to said ~~return~~ fresh air output means, said first air outlet being coupled to said output heated air duct element ~~so as to define an upstream a connection between the manifold element component and the output heated air duct element,~~ and said ~~reflux~~ first end of said air duct element of said further secondary fresh air path means being coupled to said second air outlet, ~~said first damper element being associated with said upstream connection.~~

13. (Original) A system as defined in claim 12 wherein said first damper element is associated with said first air outlet.

14. (Original) A system as defined in claim 13 wherein, said second damper is associated with said second air outlet.

15. (Currently amended) A system as defined in claim 4 wherein said forced fresh air ventilator component comprises heat recovery means for exchanging heat between ~~the discharged~~ said stale air and ~~the~~ said make-up air.

16. (Currently amended) A system as defined in claim 4 comprising control means electrically coupled to ~~the~~ a furnace blower means associated with said forced air furnace component and ~~the~~ a ventilation air blower means associated with said forced fresh air ventilator component for independently electrically actuating same.

17. (Original) A system as defined in claim 11 wherein said first air flow control means and said second air flow control means are each configured such that said first damper element and said second damper element are each respectively air pressure displaceable from said blocking configuration to said non-blocking configuration.

18. (Currently amended) A system as defined in claim 12 wherein said stale air duct element is coupled to said input indoor air duct element at a first position upstream of said forced air furnace component and said ~~reflux~~ second end of said air duct element of said further secondary fresh air path means is coupled to said input indoor air duct element at a second position downstream of said first position and upstream of said forced air furnace component.

19. (Original) A system as defined in claim 18 wherein said first air flow control means comprises a first biasing element biasing said first damper element in said blocking configuration and wherein said second air flow control means comprises a second biasing element biasing said second damper element in said blocking configuration.

20. (Original) A system as defined in claim 19 wherein said first air flow control means and said second air flow control means are each configured such that said first damper element and said second damper element are each respectively air pressure displaceable from said blocking configuration to said non-blocking configuration.

21. (Currently amended) A system as defined in claim 20 wherein said forced fresh air ventilator component comprises heat recovery means for exchanging heat between the discharged said stale air and the said make-up air.

22. (Original) A system as defined in claim 21 wherein said first damper element is associated with said first air outlet.

23. (Original) A system as defined in claim 22 wherein, said second damper element is associated with said second ~~air~~ air outlet.

24. (Currently amended) A system as defined in claim ~~5~~ 23 wherein said first and said second air flow control means are each configured such that, when only said a furnace air blower means associated with said forced air furnace component is activated, said first damper element and said second damper element are each in said blocking configuration ~~and wherein said first and said second air flow control means are each configured such that, when only the ventilation air blower means is activated, said first damper element is in said non blocking configuration and said second damper element is in said blocking configuration.~~

25. (Currently amended) An air handling system ~~as defined in claim 4 wherein said return air duct element comprises a manifold element, said manifold element comprising an air inlet, a first air outlet and a second air outlet, said air inlet being coupled to said return air output means, said first outlet being coupled to said output heated air duct element so as to define an upstream connection between the manifold element and the output heated air duct element, said reflux air duct element~~

~~being coupled to said second outlet, said first damper element being associated with said upstream connection.~~

for an indoor space comprising

a forced air furnace component,

an input indoor air duct element and an output heated air duct element

respectively coupling said forced air furnace component to said indoor space,

a forced fresh air ventilator component for discharging stale air from the indoor

space to an outdoor environment and for replacing the discharged air with make-up

air from the outdoor environment, said fresh air ventilator component comprising

stale air input means coupled to a stale air output means and fresh make-up air input

means coupled to a fresh air output means

a stale air duct element coupled to said stale air input means and to said input

indoor air duct element,

a primary fresh air duct element coupling said fresh air output means to said output

heated air duct element

characterized in that said system comprises

a further secondary fresh air path means coupling said fresh air output means to said

input indoor air duct element, wherein said further secondary fresh air path means

comprises an air duct element having a first end and a second end, said second end

being coupled to said input indoor air duct element

and wherein said primary fresh air duct element comprises a manifold component,

said manifold component comprising an air inlet, a first air outlet, a second air outlet,

a first damper element associated with said first air outlet, and a second damper

element associated with said second air outlet, said air inlet being coupled to said

fresh air outlet means, said first air outlet being coupled to said output heated air

duct element, and said second air outlet being coupled to said first end of said air

duct element of said further secondary fresh air path means.

26. (Currently amended) A system as defined in claim 25 wherein said stale air duct element is coupled to said input indoor air duct element at a first position upstream of said forced air furnace component and said ~~reflux~~ second end of said air duct element of said further secondary fresh air path means is coupled to said input indoor air duct element at a second position downstream of said first position and upstream of said forced air furnace component.

27. (Original) A system as defined in claim 26 wherein said first air flow control means comprises a first biasing element biasing said first damper element in said blocking configuration and wherein said second air flow control means comprises a second biasing element biasing said second damper element in said blocking configuration.

28. (Original) A system as defined in claim 27 wherein said first air flow control means and said second air flow control means are each configured such that said first damper element and said second damper element are each respectively air pressure displaceable from said blocking configuration to said non-blocking configuration.

29. (Currently amended) A system as defined in claim 28 wherein said forced fresh air ventilator component comprises heat recovery means for exchanging heat between ~~the discharged~~ said stale air and ~~the~~ said make-up air.

30. (Original) A system as defined in claim 29 wherein said first damper element is associated with said first air outlet.

31. (Original) A system as defined in claim 30 wherein, said second damper element is associated with said second air outlet.

32. (Currently amended) An air manifold ~~element~~ component, for an air handling system for an indoor space said air handling system comprising

a forced indoor air treatment component,

an input indoor air duct element and an output treated air duct element respectively coupling said indoor air treatment component to said indoor space,

a second forced air treatment component

a stale air duct element coupled to said second forced air treatment component and to said input indoor air duct element,

a primary return output air duct element coupling said second forced air treatment component to said output treated ~~heated~~ air duct element, said primary output air duct element comprising said manifold component,

and

a further secondary output air path means for coupling said primary return output air duct element to said input indoor air duct element, wherein said further secondary

output air path means comprises an air duct element having a first end for being coupled to said manifold component and a second end for being coupled to said input indoor air duct element.

said manifold ~~element~~ component comprising an air inlet, a first air outlet, a second air outlet, a first damper element associated with said first air outlet, and a second damper element associated with said second air outlet, said air inlet being configured for being coupled to said second forced air treatment component ~~return air duct element~~, said first air outlet being configured for being coupled to said output treated air duct element ~~so as to define an upstream a connection between the manifold element and the output treated air duct element~~, and said second air outlet being configured for being coupled to said first end of said further secondary output air path means.

33. (Currently amended) An air handling system for an indoor space comprising
a first forced indoor air treatment component,
an input indoor air duct element and an output treated air duct element
respectively coupling said first forced indoor air treatment component to said indoor space,
a second forced air treatment component
a stale air duct element coupled to said second forced air treatment component and to said input indoor air duct,
a primary output ~~return~~ air duct element coupling said second forced air treatment component to said output treated air duct element
characterized in that said system comprises a further secondary output air path means ~~for~~ coupling said primary output ~~return~~ air duct element to said input indoor air duct element, and wherein said further secondary output air path means comprises an air duct element having a first end coupled to said primary output air duct element and a second end coupled to said input indoor air duct element.

34. (NEW) An air handling system for an indoor space comprising
a first forced indoor air treatment component,
an input indoor air duct element and an output treated air duct element
respectively coupling said first forced indoor air treatment component to said indoor space,
a second forced air treatment component

a stale air duct element coupled to said second forced air treatment component and to said input indoor air duct,

a primary output air duct element coupling said second forced air treatment component to said output treated air duct element

characterized in that said system comprises a further secondary output air path means coupling said primary output air duct element to said input indoor air duct element, wherein said further secondary output air path means comprises an air duct element having a first end and a second end, said second end being coupled to said input indoor air duct element and wherein said primary output air duct element comprises a manifold component,

said manifold component comprising an air inlet, a first air outlet, a second air outlet, a first damper element associated with said first air outlet, and a second damper element associated with said second air outlet, said air inlet being coupled to said second forced air treatment component, said first air outlet being coupled to said output treated air duct element and said second air outlet being coupled to said first end of said air duct element of said further secondary output air path means.